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## INFORMATION REPORT INFORMATION REPORT

## CENTRAL INTELLIGENCE AGENCY

# 56/100c

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COUNTRY USSR (Ukrainian SSR)

REPORT

SUBJECT The 38th Signal Center in Lvov;  
PVO Radiotelegraphy Facilities and  
Procedures

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The 38th Signal Center in Lvov

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1. Headquarters of the 38th Signal Center (38 Uzel Svyazi), [redacted] originally 50X1-HUM  
was located at 61 ulitsa Ivana Franko, Lvov. It was moved in 1956 to 7 ulitsa  
Kalinina (see Appendix I). The unit was organized in Lvov in 1951; its  
members wore blue shoulderboards and Soviet Air Force insignia until late 1954  
or early 1955, when the unit was designated "38" and was assigned black  
shoulderboards and the Signal Corps insignia. There were no other changes:  
the center continued to perform the same functions [redacted] 50X1-HUM  
[redacted] it was subordinate to a PVO headquarters of not lower than  
military district level. 50X1-HUM
2. The unit's headquarters staff consisted of a commanding officer (lieutenant  
colonel); a political officer (second-in-command, lieutenant colonel), who was  
assisted by a partorg (captain), a komsorg (senior lieutenant), and a club  
director (captain); a chief of staff (lieutenant colonel), who was assisted by  
an adjutant (nachalnik stroyevoy chast) (lieutenant), two female civilian typists,  
and a master sergeant (starshina) in charge of the secret office, who often  
brought documents from Carpathian Military District Headquarters at 8 ulitsa  
Vatutina; a technical officer (second-in-command, lieutenant colonel)  
responsible for signal matters, who was assisted by a captain in charge of motor  
transportation and a major in charge of the radio repair shop; an administrative  
officer (second-in-command, captain), who was assisted by a master sergeant  
in charge of rations (starshina) and a master sergeant in charge of clothing  
(starshina); a paymaster (captain); a medical officer (lieutenant colonel), who  
was assisted by a doctor's assistant (feldsher) (senior lieutenant), a medical  
orderly (sanitar)(corporal), and a female civilian nurse.

Sub-units of the 38th Signal Center

3. Telegraph company (telegrafnaya rota): Totaling about 100 men, it consisted  
of three platoons (ST-35 teleprinters, Morse, and Baudot) of three sections

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4  
3  
2

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STATE	X	ARMY	X	NAVY	X	AIR	X	NSA	X	OCR	X	NIC	X	DTA	X
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each. The men were billeted in the building on ulitsa Kalinina which housed the center's headquarters. They worked in the telegraph center (telegrafnyy tsentr) in the cellar of a four- or five-story building at the corner of ulitsa Ivana Franko and ulitsa Sakaganskogo, which also housed some offices of the Carpathian Military District Headquarters (see Appendix II). The telegraph center operated in three shifts, each platoon providing one section for each shift. [redacted] the telegraph center contained about 21 sets, seven each of ST-35 teleprinters, M-44 Morse apparatuses, and (unspecified) instruments. The company also contained a telephone platoon (vozod telefonistov) which served the radio receiving center.

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4. Training company (uchebnaya rota): Stationed in the headquarters building on ulitsa Kalinina, it trained about 100 men for service with the signal center, in courses lasting approximately one year. Of its five platoons, three trained radiotelegraphists (primarily in Morse code), and two trained ST-35 teleprinter operators and Morse and Baudot telegraphists.
5. Administrative platoon (khozyaystvennyy vozod): Stationed in the headquarters building, it numbered about 25 men (14 or 15 drivers, six or seven cooks, two storekeepers, one medical orderly, and one clerk).
6. Radio repair shop (radio masterskaya): Located in the headquarters building, it employed five men, commanded by a major.
7. Radio transmitting center (peredayushchiy radio tsentr):
  - a. The transmitting center, located in the Pogulyanka quarter of Lvov (see Appendix I), operated in three shifts and was served by a company (two platoons) of some 80 radio operators (rota radiotov), whose commanding officer was also commander of the transmitting center. Other staff members of the company's headquarters were a political officer (second-in-command), who was later transferred; a technical officer (second-in-command), who was an expert on transmitters; two platoon commanders, who served also as duty officers; and the company sergeant major.
  - b. The central building of the transmitting center was two stories high, made of brick and covered with plaster (see Appendix IV). The ground floor contained several stationary radio transmitters, including 10 to 12 transmitters of 500 to 800 watts (of which four or five transmitters were improved versions of the RSB-F set, and five or six were RAF-KV-3 sets) and two or three RAT transmitters of 1.5-kw., which were put into operation in mid-1956. All the transmitters were mounted on a table, with the exception of the RAT sets, which stood on the floor. There were several transmitters held in reserve which were not tuned to fixed frequencies. All the stationary transmitters were numbered; the highest [redacted] was 12.
  - c. The transmitters were tuned to fixed wave lengths (fiksirovannyye): Transmitter No. 6 was tuned to Warsaw and No. 1 to Sofia.

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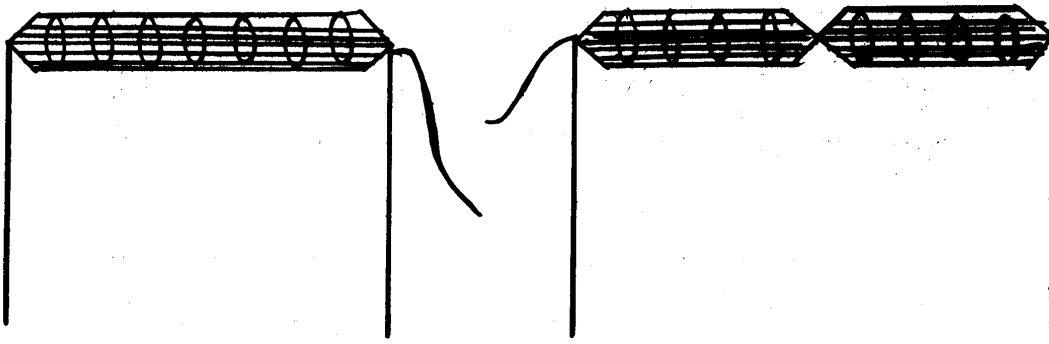
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- d. Each transmitter was always manned by a duty operator, who was prepared to transmit an order as soon as it came from the receiving center. The transmitting and receiving centers were directly connected to each other by a relay switchboard (releynny kommutator) with a range of five kilometers; the centers were equipped with microphones for transmitting and with loudspeakers for receiving, both by means of the switchboard.
- e. The transmitting center had the following mobile radios: five RAF-KV-3 sets mounted on ZIS-151 trucks, and three RAT sets mounted on GAZ-63 trucks with their power sources mounted on separate trailers.

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- f. An antenna farm (antennoye pole) was located in the compound of the transmitting center. Antennas which served the RAT sets were called "sausage antennas" (kolbasnaya antenna) and were 10 to 12 meters long and seven or eight meters high (see sketch below).



# 8. Radio receiving center (priyemnyy radio tsentr):

- a. The receiving center was located at the end of ulitsa Verkhnyaya Zelenaya, near the Fabrika Gnutoy Mebeli (furniture factory) (see Appendix I). It was manned by a company of 100 to 105 soldiers and civilians, most of whom were radiotelegraphists.
- b. The company's headquarters staff consisted of a commanding officer; a political officer (second-in-command); a technical officer (second-in-command), who specialized in the use and maintenance of radio receivers; three platoon commanders; and the company sergeant major. The company was divided into three platoons and a battery-recharging section.
- c. The receiving center comprised two main buildings, constructed of red brick. One was one story high and served as barracks; the other was two stories high, of which the first floor was used by military radiotelegraphists, the second floor by civilian radiotelegraphists, and the cellar for the recharging of batteries (akkumulyatory). The center contained 20 or 21 stationary receivers: 17 KV-M-5 sets, two or three RS sets (instruments left from World War II), and one RAT-56. All the sets were mounted on tables, two sets on each table.

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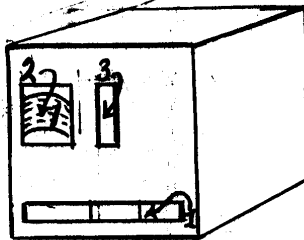
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- d. The RAT receiver was approximately one meter wide, 90 centimeters high, and 90 centimeters deep. It was capable of operating on 12 wave bands (diapazony) and was equipped with 24 tubes and a bandspread (udlinitel volny). It was used for receiving important messages, particularly from Moscow, and, unlike other sets in the center, was fitted with a Morse key to permit direct two-way contact. The RAT set was put into operation at the center in 1956.

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RAT Receiver:

1. Bandspread (udlinitel volny).
2. Dial (shkala).
3. Selector switch (pereklyuchatel diapazonov), including a detailed list of wave bands (for example, No. 1 was from 6000 to 6500 cps.).



- e. Each receiver operated on a fixed wave length with different cities (including Warsaw and Odessa) and had a reserve wave length, both of which were changed monthly.
- f. The sets were in use around the clock. Each was operated by a duty operator equipped with a headset, a log in which he copied the transmissions received, and code book containing Q-codes (shch-kod) and code numbers. Q-codes were used for standard service transmissions (such as establishment of contact), while the code numbers were used to describe the message to be transmitted (such as a combat message - boyevoye doneseniye, or a practice message - uchebnoye doneseniye).
- g. Messages received in the center contained details of targets detected:

8372	851	42	831767	39
Combat Message	Height	Course (Kurs)	Coordinates (Kvadrat)	Target (Tsel)

The top line shows the message as received, and the lower line gave the meanings of the code numbers.

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- h. A telephone operator was assigned to each table (i.e., two receivers) and was equipped with a field telephone which was connected directly with the PVO command post at Carpathian Military District Headquarters (at 8 ulitsa Vatutina or in the building at the corner of ulitsa Ivana Franko and ulitsa Sakaganskogo, which housed some of the headquarters offices). The telephone operator read the messages received just as they had been logged and transmitted to the command post by the radiotelegraphist. According to hearsay, a general was always on duty at the command post and was empowered to activate anti-aerial defense measures. The messages were transmitted in code to the command post, where they were deciphered into clear text, and the information was transferred onto maps by plotters, who were usually "extended-service" non-commissioned officers. The receiving radiotelegraphist never knew the exact contents of the messages. The duty officer at the command post had a direct connection with the USSR Ministry of

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Defense and with the Commandant of the Carpathian Military District.

- i. Three or four receivers were switched on (vklyucheniye) but were not tuned to any wave length. They were held in reserve for taking over in event of a breakdown of sets tuned to fixed wave lengths and also for receiving important combat messages; in the latter case the reserve set was operated by a reserve operator or the duty officer, and its operation was in addition to that of the regular receiver usually tuned to the wave length involved. After conclusion of the transmission, the messages received by the different sets were checked against each other to insure correct receiving of the message [sic].
- j. Four tables equipped with Morse keys and manned at all times by two radiotelegraphists were kept in the Receiving Center, in the same room which housed the receivers. The keys were used to transmit messages and were connected with the Transmitting center.
- k. The following is an example of the manner in which two-way contact was established from the Receiving Center with use of a reserve receiver:
  - (1) During regular transmission the radiotelegraphist received a code number (such as 12) from his counterpart in, for example, Warsaw, and with it the Q-code requesting a switchover to the reserve wave length. He informed the duty officer and then continued with the regular transmission.
  - (2) The duty officer consulted secret documents (possibly code books) and found the reserve frequency denoted by 12. He tuned the reserve receiver to the reserve frequency, and contact between the receiving center and Warsaw continued on both wave lengths with the use of the two receivers. This was done to deceive the enemy and was used in case of a possible air attack. The main frequency, to which the regular receiver was tuned, was used for ordinary messages, while the important message was transmitted simultaneously on the reserve frequency to the reserve receiver.
  - (3) To continue transmission on the reserve wave length as a two-way contact, the duty officer ordered the reserve receiver operator to establish contact, by the relay switchboard, with the transmitter in the transmitting center who was in contact with Warsaw.
- l. A switchboard with ten operators was located in the receiving center. Four extensions led to the switchboard in the basement of the headquarters building at the corner of ulitsa Ivana Franko and ulitsa Sakaganskogo, and other extensions led to the office of the signal center's commanding officer, the transmitting center, and the unit's headquarters.
- m. About 20 percent of the radiotelegraphists employed at the receiving center were civilians, including some women. They were chosen because of their reliability, and some because they had done similar work during their army service.

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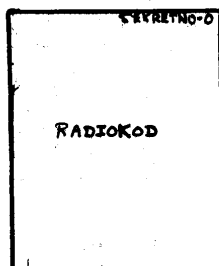
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Contact was not maintained with Tirana, Albania, or the East German command post. Direct telephone contact was maintained with all the above-mentioned command posts from the basement of the building at the corner of ulitsa Ivana Franko and ulitsa Saksagan'skogo. The command posts seemed to be manned by Soviet as well as the respective local personnel. When the duty officer at the center called Warsaw and Bucharest, he was answered first by someone who spoke Russian poorly and only later by someone who spoke it well. who. [redacted] was a Soviet. [redacted]

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#### Military Radiotelegraphy Procedure

11. The code book used by radiotelegraphists contained about 20 pages, of which three were devoted to Q-codes and the rest to code numbers. The book was about 15 by 25 centimeters in size; it was bound in blue card-board with the words "SEKRETN0-0" (secret - zero) and "RADIOKOD" printed in black at the upper right-hand corner and in the center of the cover, respectively, as shown:



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14. [redacted] the following personalities at the 38th Signal Center in Lvov:

- a. Lt. Col. Ivan Vasilyevich Cherednik, [redacted] who had been commanding officer of the Signal Center since its establishment. [redacted] 50X1-HUM 50X1-HUM 50X1-HUM
- b. [redacted] (fnu) Generalov [redacted] had been master sergeant in charge of the secret office since establishment of the center.
- c. Capt. (fnu) Govorukhin [redacted] had been administrative officer (second-in-command) since 1956. 50X1-HUM
- d. Maj. (fnu) Kolibelnikov [redacted] was commanding officer of the transmitting center from at least 1952 to 1957. 50X1-HUM
- e. Capt. (fnu) Madeko [redacted] was commanding officer of the radio receiving center from at least 1952 to 1957. [redacted] 50X1-HUM 50X1-HUM
- f. Maj. (fnu) Mendeleev [redacted] was commanding officer of the radio repair shop from at least 1952 to 1957.
- g. Sr. Lt. (fnu) Radaev [redacted] had been commanding officer of the training of the Signal Center since 1956, before which time he had commanded one of the training company's platoons. 50X1-HUM

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h. Lt. Col. (fnu) Snilov [redacted] was chief of staff until 1957, when he was retired on pension.

i. Lt. Col. (fnu) Strokotov [redacted] had been political officer (second-in-command) since establishment of the signal center.

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j. Lt. Col. (fnu) Urinov [redacted] had been technical officer (second-in-command) since 1956. He was formerly an officer in a signal regiment stationed in Lvov.

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16. Appearing on pages 9 to 18 are Appendices I to V, as indicated below:

- a. Appendix I: Town Plan (1:15,000), with legend, of Lvov.
- b. Appendix II: Sketch, with legend, of building at the corner of ulitsa Ivana Franko and ulitsa Saksaganskogo.
- c. Appendix III: Sketches A and B, with legend, of radio receiving center.
- d. Appendix IV: Sketch, with legend, of radio transmitting center.
- e. Appendix V: Sketch, with legend, of headquarters of the 38th Signal Center.

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APPENDIX I

Legend to Lvov Town Plan (1:15,000)

1. Radio Transmitting Center.

2. Radio Receiving Center.

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3. Headquarters of [redacted] 38th Signal Center; the building also housed the unit's telegraph company, training company, administrative platoon, and radio repair shop.

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4. Building at the corner of ulitsa Ivana Franko and ulitsa Saksagan-skogo which housed some offices of Carpathian Military District Headquarters and, in the basement, the telegraph center (manned by the telegraph company) and a large telephone switchboard.

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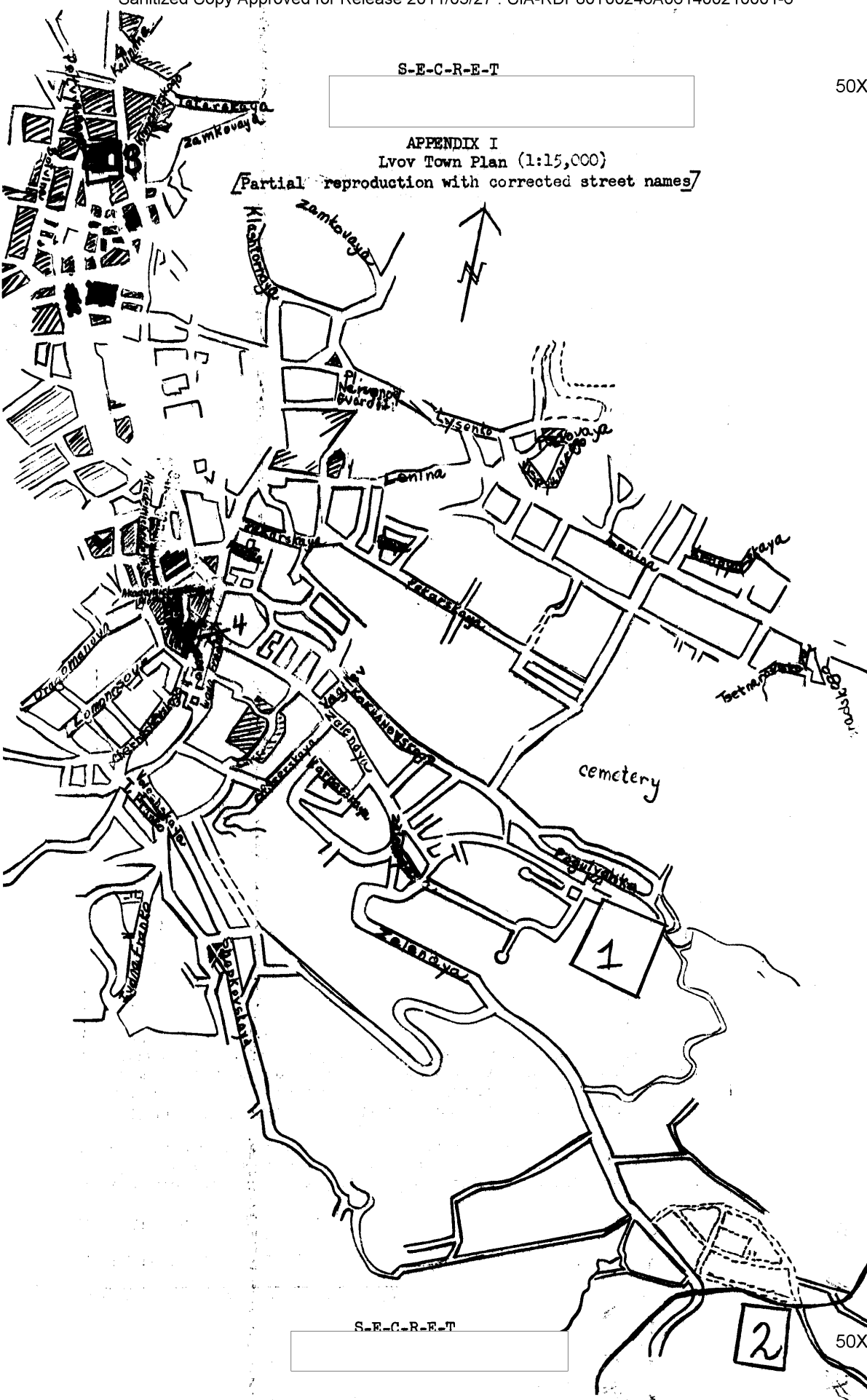
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APPENDIX I  
Lvov Town Plan (1:15,000)

[Partial reproduction with corrected street names]



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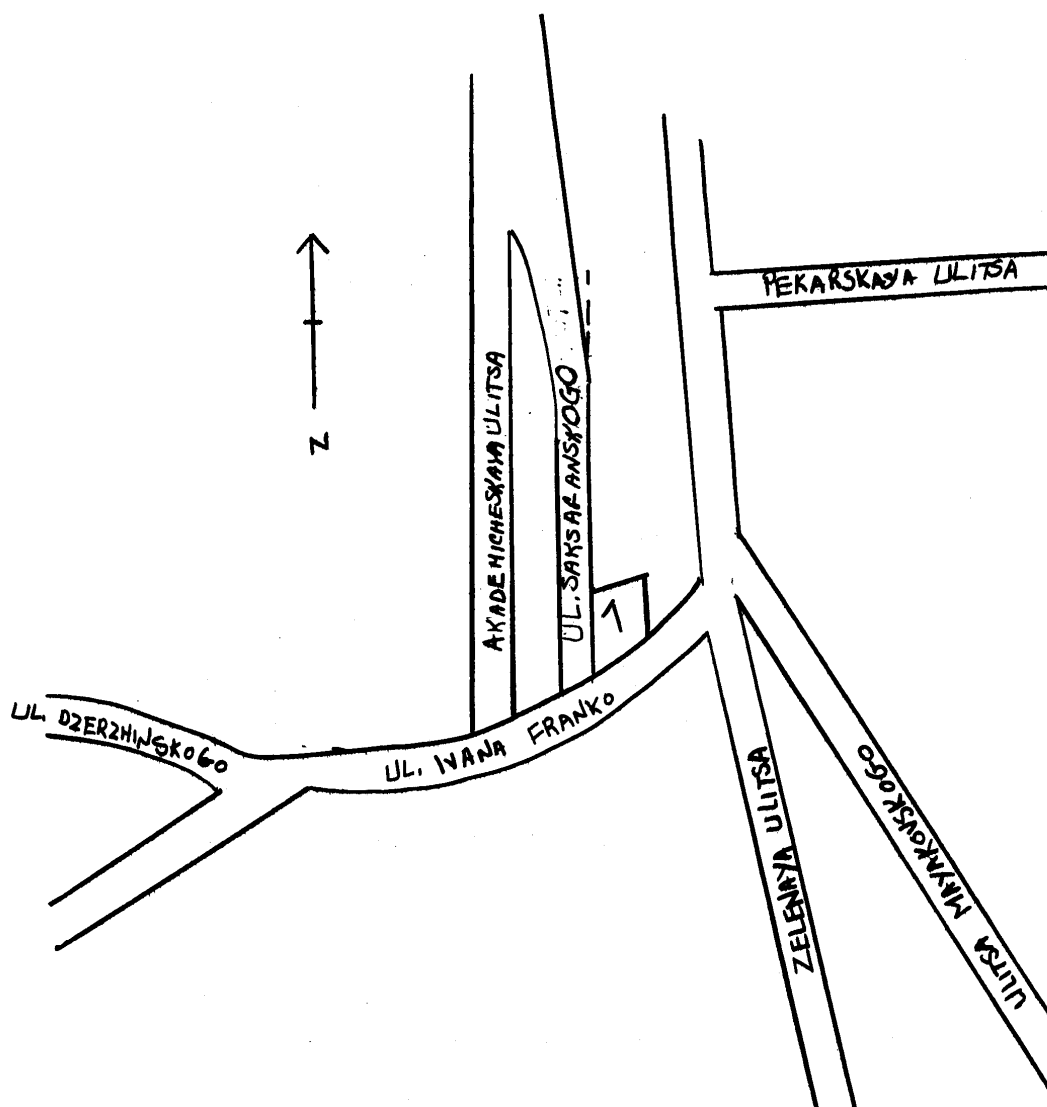
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## APPENDIX II

Legend to Sketch of Building at the Corner  
of  
ulitsa Ivana Franko and Saksaganskogo

The building was four or five stories high and housed the telegraph center (manned by the telegraph company of the 38th Signal Center), a large telephone switchboard, various offices of Carpathian Military District Headquarters, and possibly the Political Directorate of the Military District. The telegraph center and telephone switchboard were in the basement of the building.



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## APPENDIX III

Legend to Sketches of Radio Receiving Center

Figure A: Sketch of receiving center (No. 2 in Appendix I).

1. Two-story building (see Figure B).
2. One-story building used as barracks.
3. Wooden cabin in which ammunition and technical equipment were stored.
4. Washroom and latrine.
5. Guard room and sentry post.
6. Dirt road.
7. Barbed wire fence about 1.5 to two meters high.
8. Wooded area.
9. Open field.
10. Fabrika Gnutoy Mebeli (furniture factory).
11. Railway siding (tupik).

Figure B: Two-story Building at receiving center (No. 1 of Figure A).

A. Ground floor (where military radiotelegraphists worked).

1. Tables on which receivers were mounted, two to each table.
2. Receivers.
3. Reserve receivers for two-way transmission.
4. RAT-56 receiver.
5. Relay switchboard (relgyniy kommutator) for direct contact with the transmitting center.
6. Duty officer's desk.
7. Safe for secret documents.
8. Brick partition.
9. Staircase.
10. Windows.

B. Second floor (where civilian radiotelegraphists worked).

1. Tables on which receivers were mounted.
2. Receivers.
3. Table on which an instrument for checking transmissions was mounted: the messages were recorded in Morse symbols on a tape.
4. Staircase.

Note: The station for recharging batteries (akkumulyatory) was in the basement of this building.

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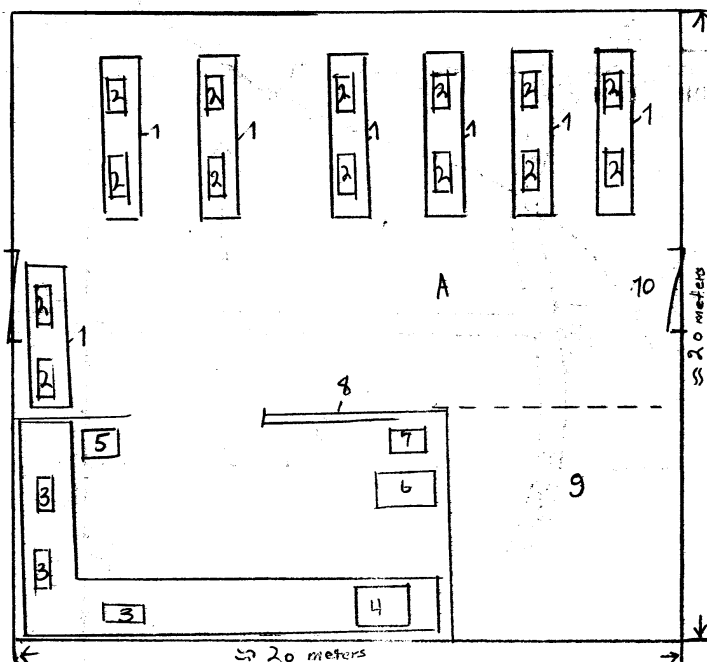
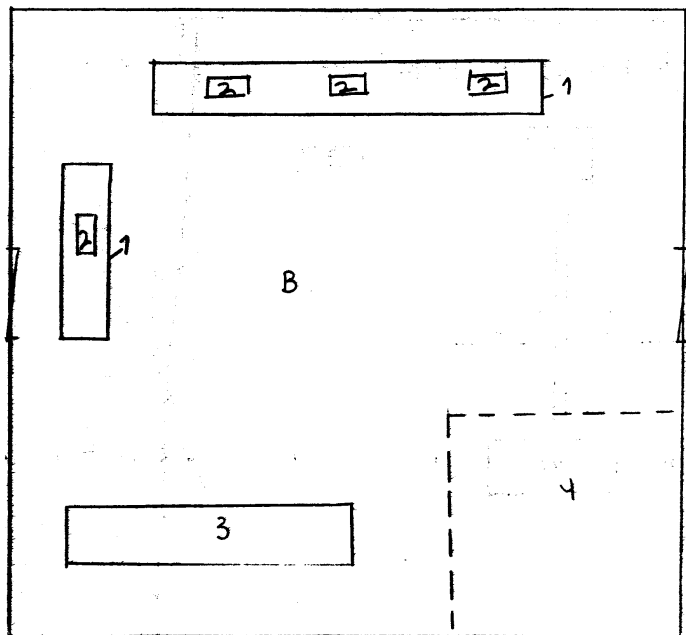


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APPENDIX III--- FIGURE B



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APPENDIX IV

Legend to Sketch of Radio Transmitting Center

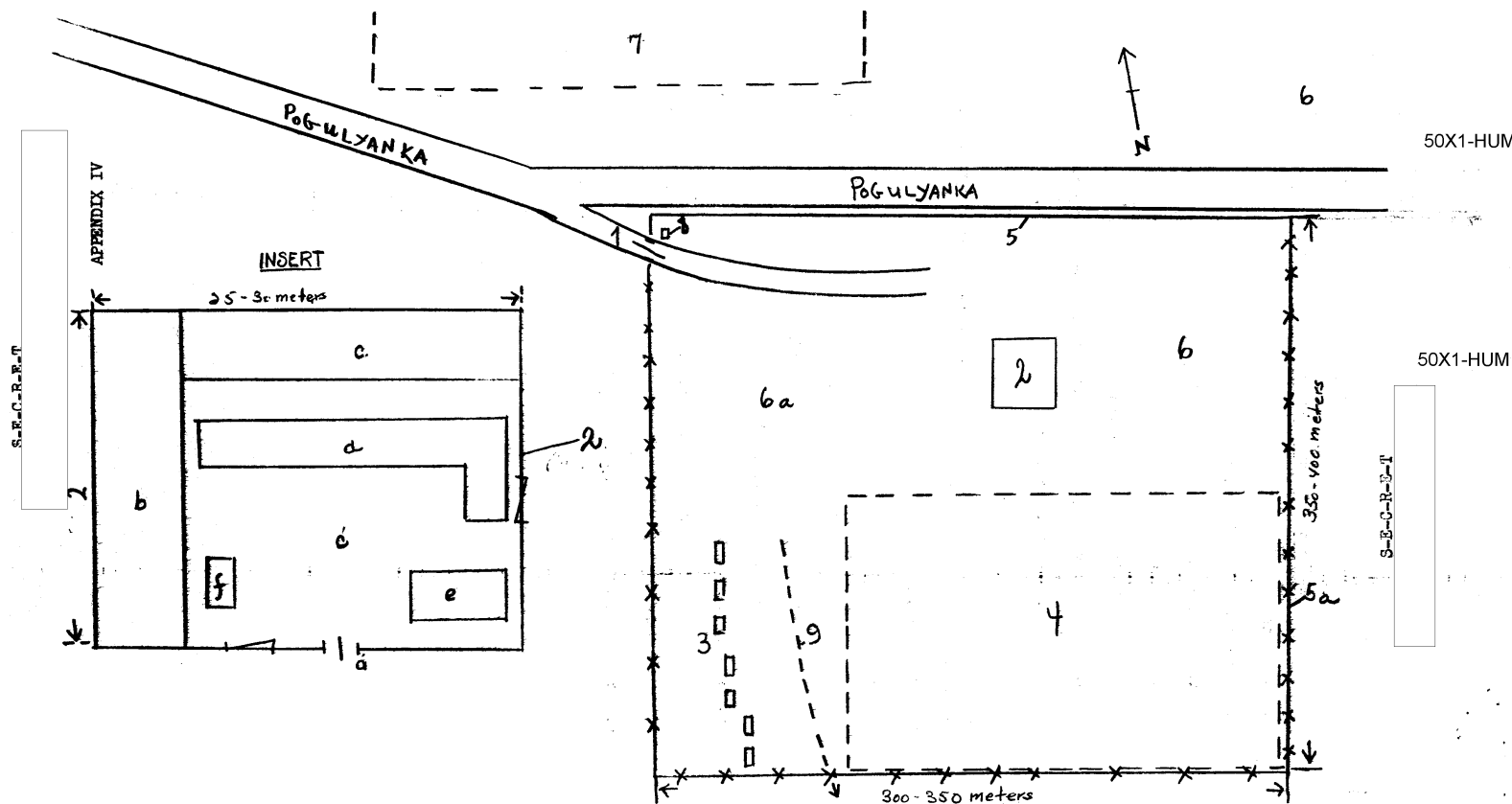
1. Entrance.
2. Central building (see insert).
  - a. Entrance to the building.
  - b. Mess.
  - c. Generator room (generatorsnaya).
  - d. Tables on which 500-to 800-watt transmitters were mounted.
  - e. RAT 1.5-kw. transmitters.
  - f. Duty officer's desk.

The above were on the first floor of the building; the second floor contained dormitories.

3. Signal vehicles.
4. Antenna farm.
5. Brick wall 1.5 to two meters high.
- 5a. Barbed wire fence 1.5 to two meters high.
6. Wooded area (mostly conifers).
- 6a. Lawn and gardens.
7. Lichakovskoye Klasbishche (cemetery).
8. Guard room and sentry post.
9. Path: a short-cut to radio receiving center.

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APPENDIX V

Legend to Sketch of Headquarters

The complex which housed the headquarters was at 7 ulitsa Kalinina in Lvov. It was several hundred years old and was surrounded by a brick wall approximately two meters high. The main building was two stories high.

1. Archway.
2. Main building: The first floor housed the training company and the administrative platoon. The telegraph company and headquarters offices (including that of the CO) were on the second floor.
3. Building containing rations stores, shoe shops, and tailors' shops.
4. Garage and parking lot.
5. Building which housed clothing stores and laundry; formerly the building was used as a stable.

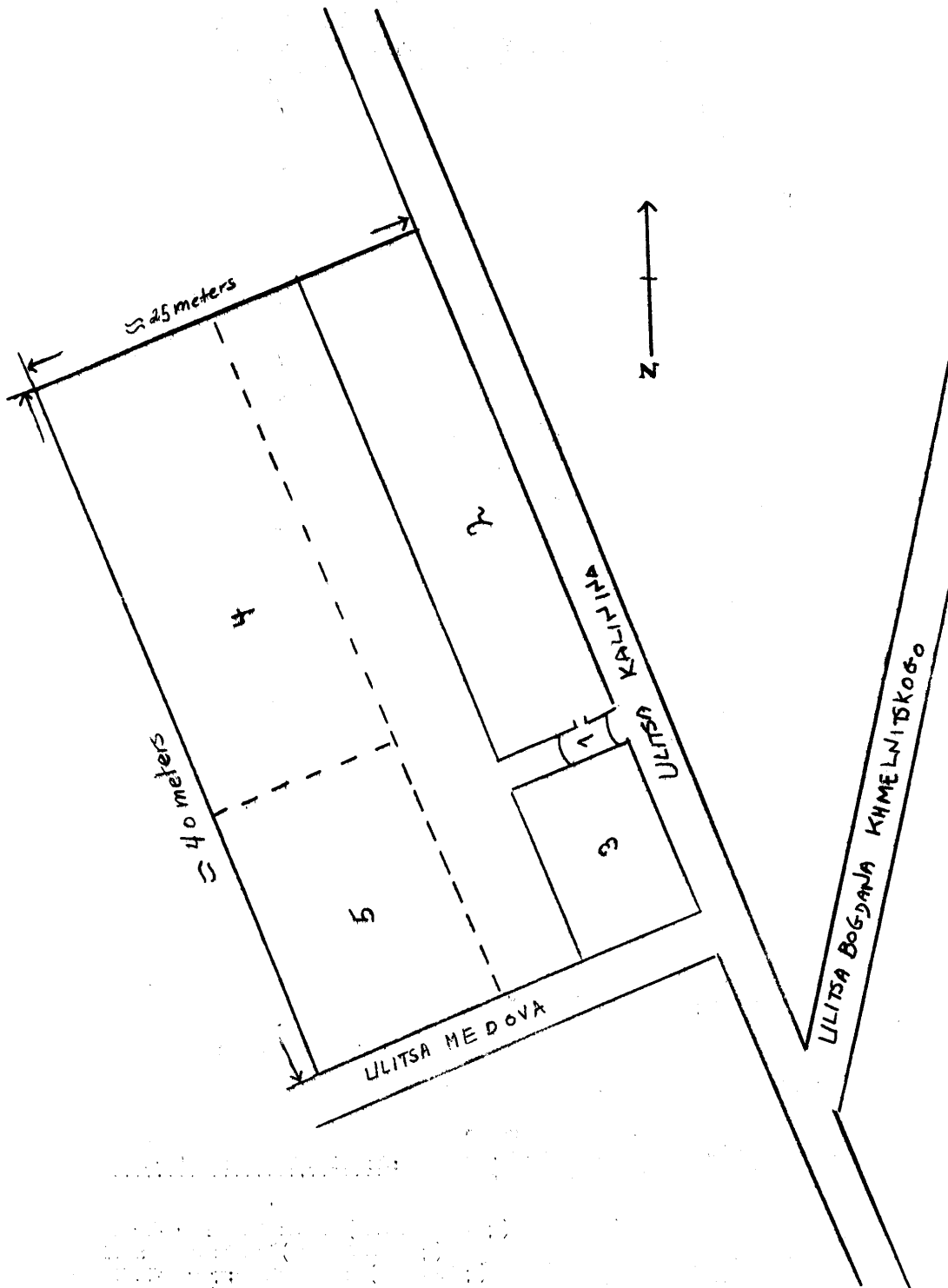
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APPENDIX V



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